## United States District Court District of Massachusetts

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ZOND, LLC.	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action No.
	)	13-11625-NMG
RENESAS ELECTRONICS CORPORATION	)	
and RENESAS ELECTRONICS AMERICA,	)	
INC.,	)	
	)	
Defendants.	)	
	)	

## MEMORANDUM & ORDER

#### GORTON, J.

Plaintiff Zond, LLC ("Zond") accuses defendants Renesas
Electronics Corporation and Renesas Electronics America, Inc.
(collectively, "Renesas") of infringing seven of its patents.
The asserted patents are directed to apparatus and methods for generating plasma and "sputtering" metals using plasma.

Now pending before the Court is the motion by Renesas to dismiss for failure to state a claim under Fed. R. Civ. P. 12(b)(6). For the reasons that follow, that motion will be allowed, in part, and denied, in part.

## I. Background and Procedural History

Zond is a Delaware corporation with a principal place of business in Mansfield, Massachusetts. Its wholly owned subsidiary, Zpulser, LLC ("Zpulser"), commercializes Zond's

patented technology by manufacturing and selling high-power plasma generators.

Renesas Electronics Corporation is a Japanese corporation with its headquarters in Tokyo, Japan. Its wholly owned subsidiary, Renesas Electronics America, Inc., is a California corporation with its principal place of business in Santa Clara. According to the Amended Complaint, Renesas supplies devices such as microcontrollers and transistors that are constructed using semiconductor circuit technology.

Zond filed its initial Complaint in July, 2013 and an Amended Complaint in September, 2013. The Amended Complaint asserts that Renesas directly and willfully infringes seven patents and has induced and continues to induce others to do so. The asserted patents are United States Patent Nos. 6,853,142 ("the '142 patent"), 6,806,652 ("the '652 patent"), 7,604,716 ("the '716 patent"), 7,147,759 ("the '759 patent"), 7,811,421 ("the '421 patent"), 6,805,779 ("the '779 patent") and 7,808,184 ("the '184 patent"). All seven patents-in-suit are directed to apparatus and methods for generating plasma and disclose applications that include "sputtering," which is a technique of using plasma to cause atoms of metal to flow to a substrate and, in some cases, form a thin film. Certain claims of the '421 and '759 patent are directed to sputtering.

## II. Motion to Dismiss

#### A. Legal Standard

To survive a motion to dismiss, a complaint must contain sufficient factual matter, accepted as true, to "state a claim to relief that is plausible on its face." Bell Atl. Corp. v. Twombly, 550 U.S. 544, 570 (2007). The Court must accept all factual allegations in the complaint as true and draw all reasonable inferences in the plaintiff's favor. Langadinos v. Am. Airlines, Inc., 199 F.3d 68, 69 (1st Cir. 2000). If the facts in the complaint are sufficient to state a cause of action, a motion to dismiss the complaint must be denied. See Nollet v. Justices of the Trial Court, 83 F. Supp. 2d 204, 208 (D. Mass. 2000), aff'd, 248 F.3d 1127 (1st Cir. 2000).

## B. Direct Infringement

Renesas moves to dismiss the claims of direct infringement on two grounds. First, it contends that the accused products cannot directly infringe because they are not "products which [are] made by a process patented in the United States" as required by 35 U.S.C. § 271(g). Second, it maintains that the Amended Complaint does not meet the standard of pleading direct infringement as laid out in Form 18 of the Federal Rules of Civil Procedure.

## 1. Applicability of § 271(g)

Renesas contends that Zond fails to state a claim to direct infringement under 35 U.S.C. § 271(g) because the accused products are not "products which [are] made by" a process claimed by any of Zond's asserted patents.

## a. Legal Standard

Section 271(g) of the Process Patent Amendments Act ("PPAA") states, in relevant part, that

- (g) Whoever without authority imports into the United States or offers to sell, sells, or uses within the United States a product which is made by a process patented in the United States shall be liable as an infringer, if the importation, offer to sell, sale, or use of the product occurs during the term of such process patent... A product which is made by a patented process will, for purposes of this title, not be considered to be so made after—
  - (1) it is <u>materially changed by subsequent</u> processes; or
  - (2) it becomes a trivial and nonessential component of another product.

35 U.S.C. § 271(g) (emphasis added).

The Federal Circuit has addressed the meaning of the phrase "a product made by a process" in two cases, <u>Bio-Technology</u>

<u>General Group v. Genentech, Inc.</u> and <u>Bayer AG v. Housey</u>

Pharmaceuticals, Inc., which are described below.

# i. <u>Bio-Technology General Group</u> v. Genentech, Inc.

In 1996, the Federal Circuit addressed whether the production of human growth hormone (hGH) infringed a patented process directed to producing a plasmid that was capable of expressing hGH. Bio-Tech. Gen. Corp. v. Genentech, Inc., 80 F.3d 1553 (Fed. Cir. 1996). The accused hGH was manufactured by producing a semi-synthetic plasmid using the patented process, incorporating the plasmid into bacteria, which expressed "insoluble met-hGH", and "purifying" the insoluble met-hGH to produce the final product, biologically-active hGH. After an evidentiary hearing, the district court entered a preliminary injunction in favor of the patent holder based upon its finding that it was likely to succeed on the merits of its claim of infringement under § 271(g).

On appeal, the Federal Circuit agreed that the accused hGH fell within § 271(g), notwithstanding its conclusions that there was "little doubt that the plasmid product of the claimed process and hGH are entirely different materials" and "hGH is not a mere modification of the plasmid." Id. at 1561. First, the court noted that Congress had occasion to comment upon an almost identical scenario in its consideration of the PPAA and had suggested that it met the requirements of § 271(g). See id. (citing S. Rep. No. 83, 100th Cong., 1st Sess. 51 (1987)).

Second, the patent-in-suit "explicitly contemplate[d]" that the patented process would be used to produce hGH and "disclose[d] in detail how to make hGH by carrying out the claimed process and other necessary steps." <u>Id.</u> Based upon both factors, the court held that the final product was not "too remote" from the patented process to be covered by § 271(g). Id.

## ii. Bayer AG v. Housey Pharmaceuticals Inc.

Next, in 2003, the Federal Circuit addressed whether a pharmaceutical drug infringes a patented process for screening for substances that inhibit or activate certain proteins by incorporating a substance identified through that process. <u>Bayer AG v. Housey Pharms., Inc.</u>, 340 F.3d 1367, 1368-70 (Fed. Cir. 2003). The district court allowed defendant's motion to dismiss and the Federal Circuit affirmed.

The Federal Circuit began its analysis by construing the meaning of the phrase "a product made by a process" as it is used in § 271(g). After examining other language in the Process Patent Amendments Act of 1988 ("the PPAA") and the legislative history, the court concluded that the term "made" means "manufactured" and the term "product" means a "physical article". Id. at 1371-76. Based upon that construction, the court held that the production of information through a patented process does not itself fall within § 271(g) because information is not a physical article. Id. at 1377. It next considered

whether the patentee had established that the drug was "made by" its patented process. It construed the term "made by" to require that the process play a "direct" role in the manufacture of the product, in contrast to a process that played a "predicate" role in identifying the product to be manufactured.

Id. at 1378. Applying that construction, the Federal Circuit held that a drug product that had characteristics that were identified using patented research processes is not a product "made by" those processes. Id.

#### b. Analysis

Renesas contends that its products cannot infringe § 271(g) as a matter of law. The first step in the analysis is determining what is produced by the patented process. OKI Am.,

Inc. v. Advanced Micro Devices, Inc., No. 04-03171, 2006 WL

2711555, at \*13 (N.D. Cal. Sept. 21, 2006) (citing NTP, Inc. v.

Research in Motion, Ltd., 418 F.3d 1282, 1323 (Fed. Cir. 2005)).

If a patented process plays a "predicate" role in identifying a component of the product to be manufactured or is used to obtain information only, the final product is not, as a matter of law,

"made" by the process. Bayer, 340 F.3d at 1378 (affirming Fed.

R. 12(b)(6) dismissal of § 271(g) infringement claim on grounds that patented process that leads to information used to produce a product is not covered by § 271(g)). If the patented process results in something other than information, the Court will

inquire 1) whether the patentee has stated a claim that the final product is "made by" a patented process and 2) whether, as a matter of law, the process falls within either of the § 271(g) exceptions (i.e. it creates an intermediate product that is "materially changed" by subsequent processes or forms only a trivial component of the final product). OKI, 2006 WL 2711555, at \*14.

Here, the threshold question is satisfied because the patents-in-suit claim methods of producing plasma and do not merely claim methods of producing information. <u>Bayer</u>, 340 F.3d at 1378.

With respect to the second part of the inquiry, the Court must accept as true at this stage the allegation that Renesas uses the patented processes to manufacture semiconductor chips abroad. That claim is plausible and is consistent with the fact that the patents-in-suit disclose applications to the manufacture of semiconductors. See, e.g., U.S. Patent No. 6,853,142 at 1:17-40 (describing application to the "semiconductor manufacturing industry" and particular application of using plasma to deposit films on substrates). Moreover, the Court cannot determine as a matter of law that the production of plasma is too remote from the production of semiconductor chips, i.e. forms just one of hundreds of

manufacturing steps, because that would require factual findings outside of the Fed. R. Civ. P. 12(b)(6) record.

#### 2. Form 18

Infringement under § 271(g) is a form of direct patent infringement. Zond, Inc. v. Fujitsu Semiconductor Ltd., 990 F. Supp. 2d 50, 54 (D. Mass. 2014) (citing Guzik Technical Enters., Inc. v. W. Digital Corp., No. 11-03786, 2011 WL 6013006, at \*2 (N.D. Cal. 2011)). As such, the relevant pleading standard is Form 18 of the Federal Rules of Civil Procedure. In re Bill of Lading Transmission & Processing Sys. Patent Litig., 681 F.3d 1323, 1334 (Fed. Cir. 2012). Form 18 requires:

(1) an allegation of jurisdiction; (2) a statement that the plaintiff owns the patent; (3) a statement that defendant has been infringing the patent 'by making, selling, and using [the device] embodying the patent'; (4) a statement that the plaintiff has given the defendant notice of its infringement; and (5) a demand for an injunction and damages.

Id. at 1334 (quoting McZeal v. Sprint Nextel Corp., 501 F.3d 1354, 1357 (Fed. Cir. 2007)). Form 18 does not require a plaintiff to identify specific claims that are infringed. Id. To the extent that Form 18 conflicts with the pleading standard described in Twombly and Iqbal, the Form controls. Id. (citing McZeal, 501 F.3d at 1360).

Renesas contends that Zond fails to meet even the low bar of Form 18 because it has not identified "a single barrier layer, seed layer, metal layer or other feature in any Renesas

semiconductor chip" that is made by one of Zond's patented processes. Such specificity is not required by Form 18. It is sufficient that, as here, Zond has identified the class of products by a salient characteristic: semiconductor products with a node measuring 40-28 nm. It need not identify a particular structure within those products to state a claim using Form 18.

## C. Willful Infringement

Renesas also moves to dismiss the claims alleging willful infringement of the patents-in-suit.

To prevail on a claim of willful infringement, the patentee must prove that 1) the accused infringer "acted despite an objectively high likelihood that its actions constituted infringement of a valid patent" and 2) that the high likelihood of infringement was either known or so obvious that the accused infringer should have known about it. K-Tec, Inc. v. Vita-Mix Corp., 696 F.3d 1364, 1378 (Fed. Cir. 2012).

Here, Zond asserts that Renesas willfully infringed its patents before Zond initiated this suit and that it continued to do so after receiving notice of the Complaint. The Court will consider whether there is sufficient factual support in the Amended Claim to allow the claim to proceed on either basis.

#### 1. Pre-Filing Knowledge

The Amended Complaint alleges that, "upon information and belief," Renesas knew about the patented technology and patents-in-suit prior to the initiation of this action because

Renesas has attended and participated in numerous industry conferences, including without limitation the 2007 SEMICON WEST in the United States, where Zond's patented technology was showcased, including through presentations and marketing materials identifying the Patents-in-Suit.

Such sparse and speculative allegations are insufficient to state a claim to relief under the pleading standard articulated in <a href="Twombly">Twombly</a> and <a href="Igbal">Igbal</a>. Compare Avocet Sports Tech., Inc.</a> v.

<a href="Garmin Int'1">Garmin Int'1</a>, Inc.</a>, No. 11-04049, 2012 WL 2343163, at \*2-3 (N.D. Cal. 2012) (finding that complaint made out "barest factual assertion" of pre-suit knowledge where it alleged that competitor viewed the patented devices and informational materials at trade shows and discussed them with representatives of the patentee). The Court agrees with the other court in the district to consider these precise allegations that they do not give rise to a plausible inference of pre-suit knowledge. <a href="See Zond">See Zond</a>, Inc. v. <a href="SK Hynix Inc.">SK Hynix Inc.</a>, No. 13-11591-RGS, 2014 WL 346008, at \*2 (D. Mass. Jan. 31, 2014) (holding that allegation that defendants attended the 2007 SEMICON WEST trade show was insufficient to establish pre-suit knowledge).

#### 2. Post-Suit Conduct

Zond alleges that it is entitled to a finding of willful infringement because Renesas continues to sell the allegedly infringing products despite learning of the patents-in-suit through the service of the initial Complaint in July, 2013. Renesas maintains that Zond cannot prevail because it has not moved for a preliminary injunction in this case.

Renesas invokes a rule derived from dicta in In re Seagate Technology, LLC. The Federal Circuit explained in Seagate that, because a preliminary injunction against continuing infringement would in most cases provide an adequate remedy, a patentee who does not try to stop the infringement by seeking a preliminary injunction is not entitled to enhanced damages based on a theory of post-filing willfulness. In re Seagate Tech., LLC 497 F.3d 1360, 1374 (Fed. Cir. 2007). Several courts subsequently concluded that Seagate prohibits plaintiffs from alleging willful infringement based solely upon post-filing conduct unless they also seek preliminary injunctive relief. See, e.g., Brandywine Commc'ns Techs., LLC v. Casio Computer Co., 912 F. Supp. 2d 1338, 1353 (M.D. Fla. 2012). This Court, however, has recognized an exception where a plaintiff does not practice the patented invention and does not compete with defendant because, in such instances, a plaintiff would be unlikely to convince a court that it suffered irreparable harm from the ongoing

infringement. <u>Englishtown, Inc.</u> v. <u>Rosetta Stone Inc.</u>, 962 F. Supp. 2d 355, 358-59 (D. Mass. 2013).

Here, Zond admits that it practices the patented technology but attempts to avoid dismissal by suggesting that it does not manufacture semiconductor chips and therefore does not compete with Renesas directly. It asserts that it would be unlikely to prove irreparable harm at the preliminary injunction stage, notwithstanding the fact that it asserts in its Amended Complaint that it is being irreparably harmed by the ongoing infringement. The Court agrees that seeking preliminary injunctive relief would have been futile where there is no allegation of direct competition. As a result, plaintiff may proceed on its claim of willful post-filing infringement.

## D. Induced Infringement

Zond claims that Renesas actively induced its customers, suppliers, original equipment manufacturers and original design manufacturers to make, use, sell and offer for sale the accused products in a manner that infringes one or more claims in the patents-in-suit under 35 U.S.C. § 271(b). It suggests that the inducing activity began before this action was initiated and continues to occur after the filing of the initial Complaint.

To prove induced infringement of a patent under § 271(b), a patentee must show 1) direct infringement by a third party, 2) that the accused infringer knowingly induced that infringement

and 3) that the accused infringer had the specific intent to encourage infringement by third parties. Cross Med. Prods., Inc. v. Medtronic Sofamor Danek, Inc., 424 F.3d 1293, 1312 (Fed. Cir. 2005) (citing MEMC Elec. Materials, Inc. v. Mitsubishi Materials Silicon Corp., 420 F.3d 1369, 1378 (Fed. Cir. 2005)). Form 18 does not apply to claims of direct infringement and Zond must therefore satisfy the stricter pleading requirements of Twombly and Iqbal. SK Hynix, 2014 WL 346008, at \*2 ((citing Superior Indus., LLC v. Thor Global Enters. Ltd., 700 F.3d 1287, 1295 (Fed. Cir. 2012)).

## 1. Direct Infringement by Third Parties

For the reasons stated above, Zond has successfully pled direct infringement by third parties under § 271(g). The Amended Complaint alleges that customers, suppliers and others directly infringe by offering to sell, selling or importing products that contain the accused semi-conductor chips. That allegation is sufficient to meet the standards of Form 18. See SK Hynix, 2014 WL 346008, at \*4 (applying the Form 18 standard when considering direct infringement by a third party as an element of an induced infringement claim).

#### 2. Knowledge

For the reasons stated previously, the facts alleged by Zond do not support a plausible inference that Renesas had knowledge of the patents-in-suit before being served with the

initial Complaint in July, 2013. Thus, Zond's claims of induced infringement based upon conduct prior to the filing of the instant lawsuit will be dismissed because Renesas could not have "knowingly" induced infringement when it lacked knowledge of the patents-in-suit.

On the other hand, Zond has stated a claim of post-filing knowledge because the filing of the Complaint put Renesas on notice. See Zond, 2014 WL 346008, at \*3 (holding that a patentee may base a claim of induced infringement on post-filing conduct by filing an amended complaint that alleges that the accused infringer obtained the requisite knowledge upon receiving the initial complaint).

#### 3. Specific Intent

The Amended Complaint alleges that, upon information and belief, Renesas uses "advertising, marketing and sales activity" to entice its original equipment manufacturers and original design manufacturers to infringe the patents-in-suit by using the infringing semiconductor chips in their own products.

Renesas argues that such formulaic and generalized assertions do not satisfy the pleading standards of <u>Twombly</u> and <u>Iqbal</u>. Two courts in this District have disagreed and found the precise allegations at issue here sufficient to state a claim of intent to induce post-filing infringement. <u>See, e.g.</u>, <u>SK Hynix</u>, 2014 WL 346008, at \*5; Fujitsu, 990 F. Supp. 2d at 58. The Court agrees

and finds that Zond has stated a claim of specific intent to induce infringement.

## ORDER

For the foregoing reasons, defendants' motion to dismiss (Docket No. 16) is, with respect to the claims of willful infringement based upon pre-filing conduct and induced infringement based upon pre-filing conduct, ALLOWED, but is, with respect to the claims of direct infringement and the claims of willful infringement and induced infringement based upon post-filing conduct, DENIED.

So ordered.

/s/ Nathaniel M. Gorton
Nathaniel M. Gorton
United States District Judge

Dated August 15, 2014